

Meeting Minutes Transmittal

Over Ground Transfer Lines to Support Tank C-104 Retrieval
 Ecology Offices
 1314 West Fourth Avenue
 Kennewick, Washington
 March 28, 2002
 8:30 a.m. – 9:30 a.m.

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 EDMC

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Over Ground Transfer Lines to Support C-104 Retrieval Review Meeting.

James F. Thompson, Jr.
 James F. Thompson, Jr., DOE-ORP

Date: 5/19/02

Jeffery Lyon
 Jeffery Lyon, Washington State Department of Ecology

Date: 5/04/02

CHG Concurrence:

Keith E. Carpenter
 Keith E. Carpenter, CHG

Date: 5/13/02

PURPOSE: Interact with Washington State Department of Ecology regarding Tank 241-C-104 Waste Retrieval System waste routing alternatives. Identify regulatory concerns, finalize attributes, and approach.

Attachment 1: Presentation Materials
 Attachment 2: Meeting Minutes
 Attachment 3: Attendee List
 Attachment 4: Distribution List

Attachment 1

**Over Ground Transfer Lines to Support Tank C-104 Retrieval
Presentation Materials**

**Ecology Offices
1314 West Fourth Avenue
Kennewick, Washington
March 28, 2002
8:30 a.m. – 9:30 a.m.**

AGENDA

- PURPOSE
- BACKGROUND
- ISSUES
- WASTE ROUTING EVALUATION
- EXPECTED RESULTS
- EVALUATION SCHEDULE

PURPOSE

- Interact with Washington State Department of Ecology regarding Tank 241-C-104 Waste Retrieval System Waste Routing Alternatives.
- Identify regulatory concerns, finalize attributes, and approach.

TANK 241-C-104 WASTE RETRIEVAL PROJECT (W-523) BACKGROUND

- The project mission is to provide in-tank and tank farm SSCs to retrieve high-level waste from SST C-104 and transfer waste to DST AY-101.
- The conceptual design (RPP-8312 Sept. 2001) transfer route includes use of existing 4 inch WRSS transfer lines (SN-200 and SL-100) from 241-C-106 to 241-AY Tank Farm. 241-C-106 is a drain back point.
- Preliminary Design will be developed in FY 2002

TANK 241-C-104 WASTE RETRIEVAL PROJECT (W-523) SCHEDULE

- Procurement/Construction/Testing FY 2004 through FY 2007.
- Operation (waste retrieval) FY 2008
- Demobilize [Remove above grade equipment including Over ground transfer (OGT) lines] FY 2009

TPA MILESTONES APPLICABLE TO 241-C-104 RETRIEVAL

- TPA M-45-03F Complete full scale sludge/hard heel, confined sluicing and robotic technologies waste retrieval demonstration at Tank C-104 (TBE)
- TPA M-45-03G Complete ... cold demonstration (6/30/2004)
- TPA M-45-03H Complete ... design (9/30/2004)
- TPA M-45-03I Complete ... construction (9/30/2006)

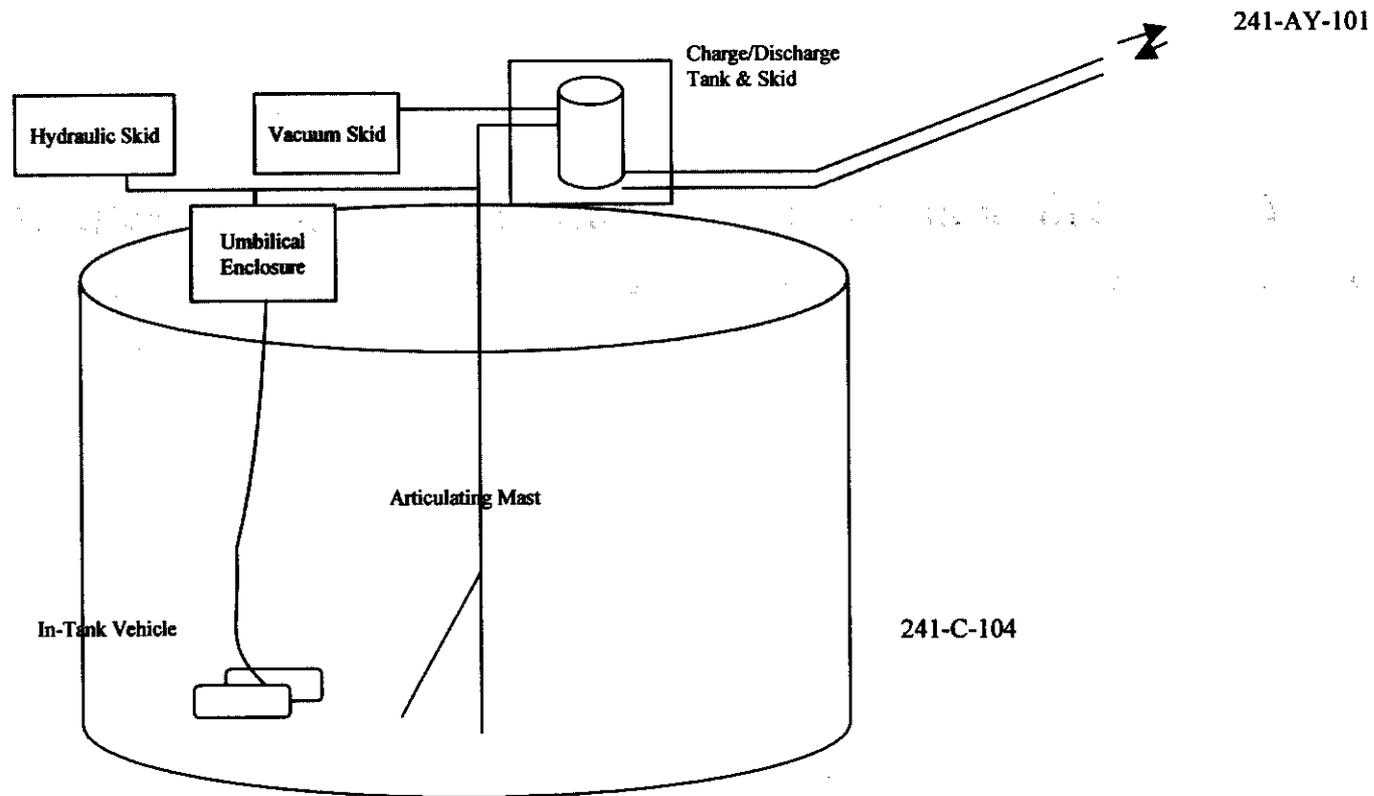
REGULATORY COMPLIANCE ACTIONS

- Hose-in-hose OGT line will be designed, fabricated, and operated in accordance with the requirements of WAC-173-303-640:
 - (3) Design and installation of new tank systems or components (including a written assessment by an independent qualified registered professional engineer)
 - (4) Containment and detection of releases
 - (5) General operating requirements
 - (6) Inspections
 - (7) Response to leaks or spills and disposition of leaking or unfit for use tank systems

REGULATORY COMPLIANCE ACTIONS (Continued)

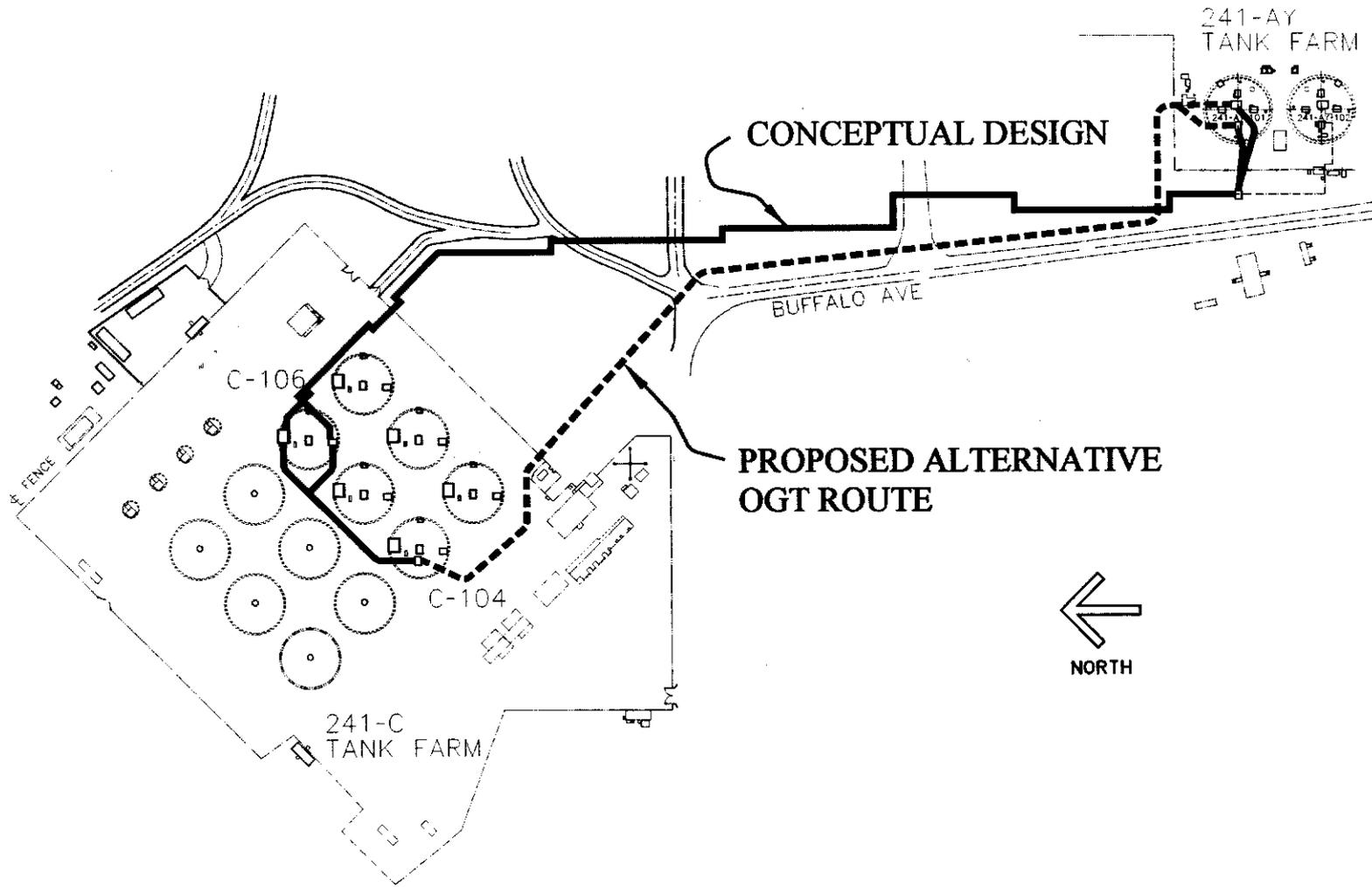
- The SST RCRA Part A will be revised to cover transfers from Tank 241-C-104 to 241-AY-101 (including OGT or other transfer line changes)
- Tank 241-AY-101 modifications will be included in the DST Part B Permit Application in the future.

241-C-104 RETRIEVAL SYSTEM DIAGRAM



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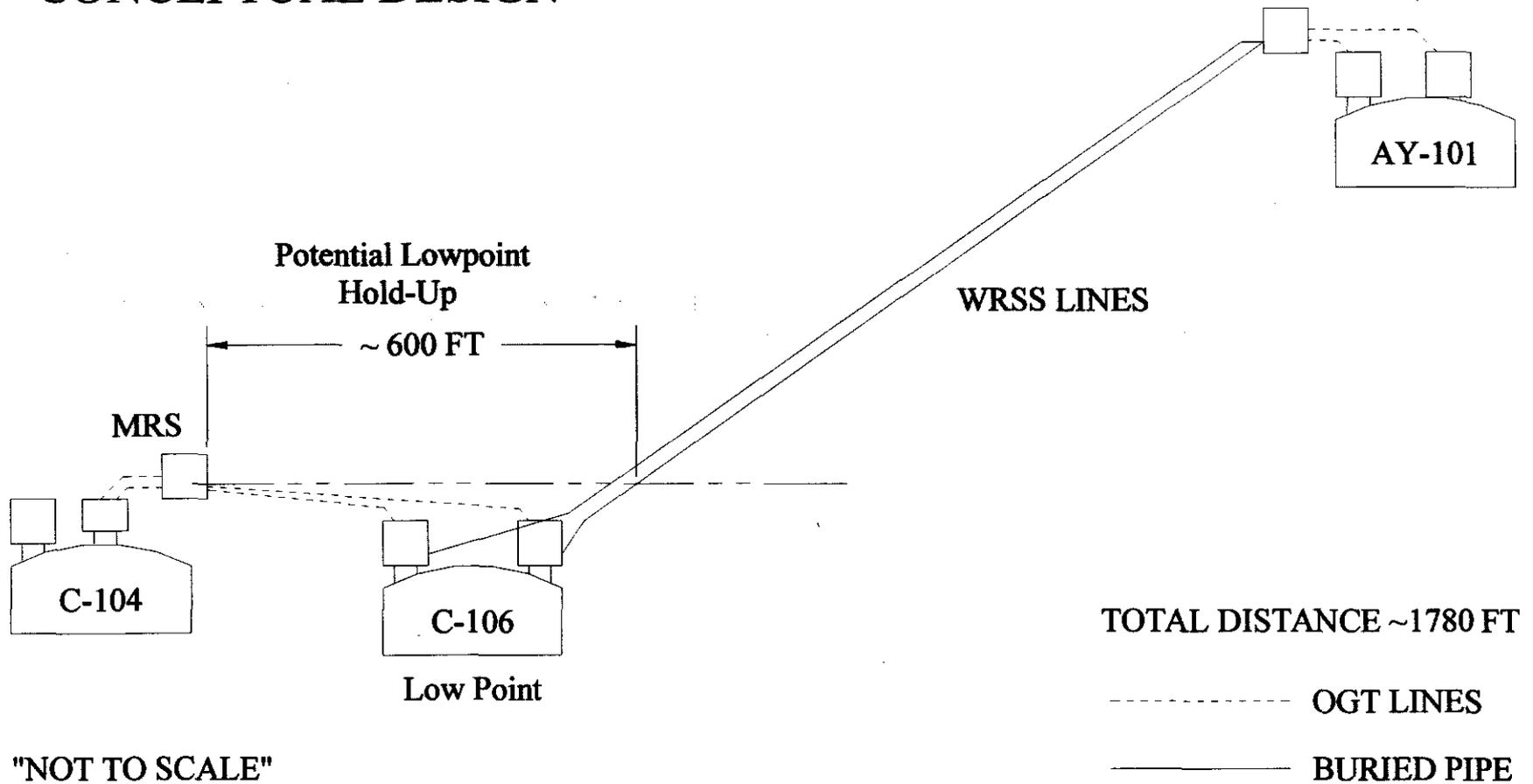
PLAN VIEW OF WASTE ROUTING



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ELEVATION VIEW OF WASTE ROUTING

CONCEPTUAL DESIGN

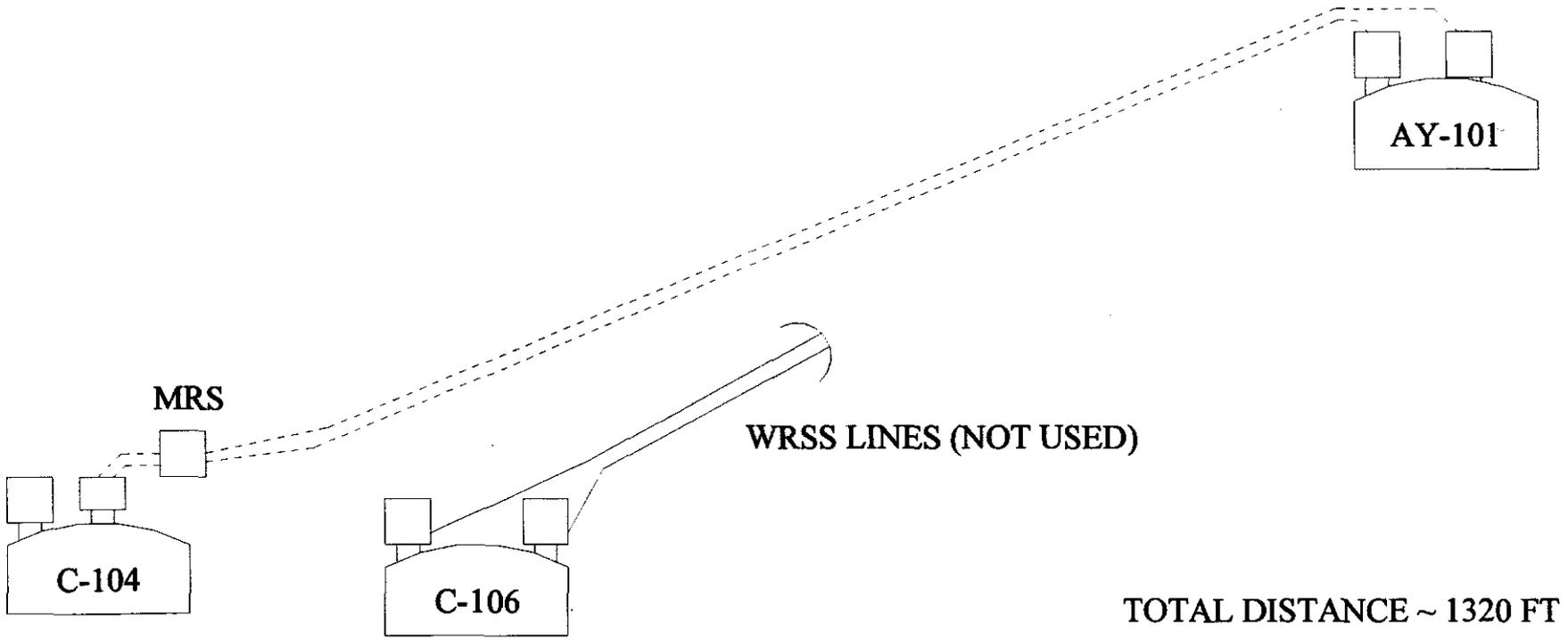


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ELEVATION VIEW OF WASTE ROUTING

ALTERNATIVE OGT LINES

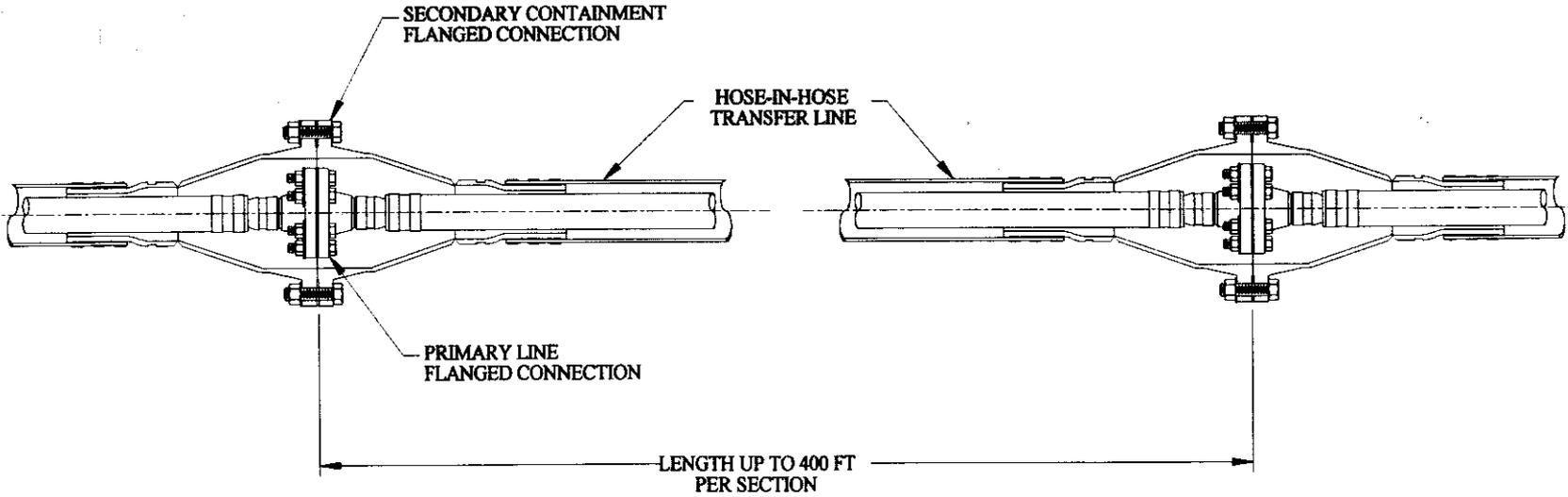


TOTAL DISTANCE ~ 1320 FT

- OGT LINES
- BURIED PIPE

"NOT TO SCALE"

Over-Ground Transfer Line (OGT) Section View



ISSUES

- **Baseline Includes Potential Drain Back to C-106 (~ 500 Gallons)**
- **Alternatives Include ~1000 feet of OGT line outside of fence of C and AY Tank Farms. The OGT lines would be coupled segments of hose in hose design.**

ALTERNATIVES

- 1) Conceptual Design Baseline (mix of OGT and existing transfer lines, AY-101 in-tank transfer pump, and AY-101 in-tank solids settling)
- 2) Use OGT lines (2, 3, and 4 inch alternatives) exclusively (bypass 241-C-106). The WRSS lines would still be available for other tank retrieval projects.
- 3) Use top side pump and solids separation at AY-101
- 4) Use single pass rather than retrieval and recirculation of AY-101 supernatant

ATTRIBUTES & DECISION CRITERIA

- Environmental, Safety, Health risks and ALARA
 - Dose rate to workers
 - Material at risk
 - Secondary line holdup prior to leak detection (assumes a primary line guillotine break by 241-AY-101)
 - Recovery time
 - Potential of primary line failure
- Life-cycle cost
- Schedule (campaign duration)
- DST Space needs

ATTRIBUTES & DECISION CRITERIA (Continued)

- Reliability, Availability, Maintainability
- Technical Maturity
- Relative ease of application to other receiver tanks
- Relative ease of application to subsequent SST retrievals

EXPECTED EVALUATION RESULTS

- Potential to eliminate routing through Pit 241-C-06A and Pit 241-C-06C and potential drain back to previously retrieved Tank 241-C-106
- Reduce potential line holdup from up to 500 gallons to less than 10 gallons
- Out of tank quantity of material at risk for existing baseline route, 2, 3, and 4 Inch OGT lines are ~3900 gallons, ~2000 gallons, ~3000 gallons, and ~3900 gallons respectively

EXPECTED EVALUATION RESULTS (Continued)

- Retrieval campaign/operating schedule can still be met.
- No additional regulatory limitations specific to OGTs.

ENGINEERING EVALUATION SCHEDULE

- Start Engineering Evaluation Dec. 10, 2001
- Draft Engineering Evaluation Mar. 12, 2002
- Final Engineering Evaluation Apr. 5, 2002

Attachment 2

**Summary of Discussion and Commitments/Agreements
Over Ground Transfer Lines to Support Tank C-104 Retrieval
Ecology Offices
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OVER GROUND TRANSFER LINES TO SUPPORT TANK C-104 RETRIEVAL

The purpose of this meeting was to present to Washington State Department of Ecology (Ecology) the waste routing alternatives for the Tank 241-C-104 Waste Retrieval System, and to identify any regulatory concerns that Ecology may have with the proposed waste routing approach.

Mr. Keith Carpenter, CH2M Hill Hanford Group, Incorporated (CHG), presented the waste routing alternative being reviewed to retrieve waste from Tank 241-C-104 to Mr. Jeffery Lyon of Ecology. The results of the waste routing study were presented. A copy of the presentation is contained in Attachment 1.

The waste routing proposed is to use Resource Conservation and Recovery Act (RCRA) compliant hose-in-hose over ground transfer lines (OGT) to transport the waste from Tank 241-C-104 to Tank 241-AY-101. OGT lines have been used extensively within the Hanford tank farm fenced boundary, but have not been used outside of the tank farm fenced area. Therefore, the Office of River Protection and CHG wanted to solicit Ecology's input and identify any regulatory concerns before proceeding with this approach. Upon completion of the briefing, Mr. Lyon stated that he had no concerns with the proposed approach. However, Mr. Lyon stated that he would circulate the presentation materials and proposed approach to other personnel within Ecology to determine if there were any other concerns.

Mr. Jim Thompson, Office of River Protection (ORP), took the action to prepare and distribute draft meeting minutes and to incorporate comments and input from the meeting participants prior to formally transmitting the minutes to Ecology and CHG.

Attachment 3

**Attendance List
Over Ground Transfer Lines to Support Tank C-104 Retrieval
Ecology Offices
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Meeting Title: Over Ground Transfer Lines to Support Tank C-104 Retrieval

Date: March 28, 2002.

Name	Company	Phone Number
Jeffery Lyon	Ecology	736-3098
Keith E. Carpenter	CHG	372-2452
James F. Thompson	ORP-AMPD	373-9757

Distribution:

ADMINISTRATIVE RECORD (two copies): A1-14
Debbie Isom (two copies): H6-08